



सत्यमेव जयते

दूरभाषी:
TELEPHONE: 25597165
e-mail : rgkamath@barc.gov.in

भारतसरकार
GOVERNMENT OF INDIA
भाभापरमाणुअनुसंधानकेन्द्र
BHABHA ATOMIC RESEARCH CENTRE
प्रगतभारीपानीप्रभाग
ADVANCED HEAVY WATER REACTOR DIVISION

ट्रॉम्बे,
मुंबई - 400 085,
HALL No. 7,
TROMBAY,
MUMBAI - 400 085

Ref: AHWRD/RR/MF (computer No.83148) /2023/P 83942

Feb 28 ,2023

To,
All Parties Concerned

Sub: Repairs & Maintenance - Invitation to quote

Dear Sirs, Note : Only Postal Quotations will be accepted.

1. Sealed quotations are invited by undersigned for and on behalf of the President of India for the work as per the requirements given in the Scope of Supply, details listed in this document, Technical Specification (enclosed as Annexure-I).
2. The quotation must reach Head, Advanced Heavy Water Reactor Division, BARC Mumbai at given address latest by **15/03/2023**. The envelope should be super scribed "**Repairs and Maintenance of Instruments for an Experimental Facility-**" and should indicate this office Ref. No. and due date of opening clearly. The envelope should be sealed.
3. The quotation should be send by speed post/registered post/ordinary post through Indian Postal Services only so that it reaches office on or before **15/03/2023 by 16.00 Hrs.** Address for sending quotation is as following:

Head, AHWRD,
Engineering Hall No.7,
Bhabha Atomic Research Centre
Trombay Mumbai 400085
(Kind attention: Smt. Rajalakshmi R, AHWRD, Tel no. 2559 5154)

1 SCOPE OF THE WORK:

The scope of work involves "**Repairs and Maintenance of Instruments for an experimental facility**".

Technical Specification enclosed as Annexure-I. The following table summarises the quantity of scope of work

S.No.	Description	Unit	Qty.
1	Removal and re-installation of Differential Transmitters.	Nos.	30
2	Calibration of Differential or pressure Transmitters	Nos	30
3	Calibration & Reinstallation of temperature transmitters	Nos.	50
4	Repairing, Servicing, Calibration and Re-Installation of Control Valve	Nos.	3

5	Re-routing of 37 core signal cables	Mtrs.	500
6	Panel re-wiring & Terminations	Nos.	1000
7	Re-routing/Modification of 3/8" SS tubing	Mtr	100
8	Swaging of 3/8" & 1/4" fitting	Nos.	100

2 Free Issue Materials:

No free issue materials for this work order.

3 Duration of work:

The entire work is to be completed within **6(Six) months** reckoned from the 5th day after the date of issue of the work order. This period should be strictly adhered to.

4 General Instructions:

- 4.1 In this document, the agency/supplier on whom the work order will be placed is referred to as the "Contractor". The agency executing/issuing this work order will be referred to as the "Client".
- 4.2 **The bidders should quote in a modular way, rate wise, for work listed sheet wise, as per the table in the scope of work. Lump-Sum quotations will not be considered.**
- 4.3 GST: Since the goods are to be supplied against the work order meant for research purpose of a research organization under DAE, Govt. of India, the applicable GST for such cases shall apply. These should be quoted separately.
- 4.4 Taxes, duties, if any, applicable should be indicated separately.
- 4.5 Where, the prices quoted are inclusive of excise duty, the percentage/quantum of excise duty included in the quoted price should be specifically indicated in the tender.
- 4.7 **The firms executed similar jobs as detailed under the scope of work above in the past in BARC will be preferred.**
- 4.8 **For any technical clarifications, the bidder may contact through E-mail at rgkamath@barc.gov.in.**
- 4.9 **Place of work: Hall-3 & Hall-7, BARC, Trombay, Mumbai-400085.**
- 4.10 The contractor shall have to maintain the area assigned to him for the work very clean and shall follow the instructions of Engineer in-charge from the Client side in this regard. All equipment/tools etc. are to be removed and clean the area after the end of the day's work.
- 4.11 In case any extension in the job completion period is required, the contractor has to write to the Client, giving proper justification for the delay. The decision to approve the extension rests with the Client. No extra cost will be paid to the Contractor for this extension of time.
- 4.12 With the offer, bidders should please furnish the detailed information regarding whether an ex-employee of BARC is working in your organization or whether any of your relatives is working in DAE/BARC or you are an ex-employee of DAE/BARC. In absence of such information or wrong information, the quotation or contract is likely to be rejected/cancelled.
- 4.13 The offer shall be kept valid for a period of 60 days from the date of opening of the tender.
- 4.14 The Client reserves the right to alter the quantity while placing the order.
- 4.15 The Client reserves the right to accept or reject any or all the quotations received without assigning any reasons whatsoever.

5 Commercial Terms:

- 5.1 Payment will be made by ECS after satisfactory completion of the work as per Government rules.
- 5.2 At the time of settlement of claims, the Contractor has to submit bills/Invoice in triplicate, advanced stamped receipt, work completion certificate from the Client and Bank Details of the contractor to the Client.

- 5.3 Taxes: Incometax@2% and applicable surcharge will be deducted from your bill. TDS certificate to that effect will be issued by BARC, if so desired.
- 5.4 Bidder should note that BARC is final consumer of the goods/services procured and does not intend to make any outward work. BARC will not avail the benefits of input tax credit and hence, the good can be supplied without quoting the GSTIN of BARC, Mumbai on invoice. The invoices taxed under GST, as per rates applicable under the GST schedule of rates, will be admitted for payment.
- 5.5 GSTN Invoice: The invoice raised by the registered supplier of taxable goods/services along with other details specifically indicating: GSTN, PAN, Location of work, tax component to be separately indicated.
- 5.6 An undertaking shall be furnished by the registered supplier that the GST has been promptly deposited with the authorities.

6 Option:

After the placement of the work-order, the Client reserves the right to terminate the contract by giving a notice of one month and without any financial obligation on the part of the client. In the event of cancellation of the contract for any reason, the payment for work carried out will be on the basis of work that has been fully completed. Payment will not be made for work which has not been fully completed and found un-acceptable after review by the client.

7 Confidentiality:

- 7.1 No party shall disclose any information to any third party concerning the matters under this contract generally. In particular, any information identified as proprietary in nature by the disclosing party shall be kept strictly confidential by the receiving party and shall not be disclosed to any third party without the prior written consent of the original disclosing party. This clause shall apply to the sub-contractors, consultants, advisers or the employees engaged by the party with equal force.
- 7.2 Restricted information categories under section 18 of the Atomic Energy Act, 1962 and "Official Secrets" under section 5 of the official secret act, 1923: Any contravention of the above-mentioned provisions by any contractor, sub-contractor, consultant, adviser or the employees of a contractor will invite penal consequences under the aforesaid legislation.
- 7.3 Prohibition against use of BARC's name without permission for publicity purposes: The contractor or sub contractor, consultant, adviser or the employees engaged by the contractor shall not use BARC's name for any publicity purpose through any public media like press, radio, T.V. or Internet without prior approval of BARC.
- 7.4 The contractor on receiving the order shall give an undertaking and shall not disclose and share the contents of tender with any other division of BARC without permission from Head, AHWRD.

8 Safety:

- 8.1 All the persons deployed by the contractor at site shall be physically and mentally fit.
- 8.2 All applicable industrial & safety precautions shall be taken by the contractor in respect of their personnel working at site.
- 8.3 Above work calls for adherence to safe work practice. BARC shall not be responsible for any damage, injury, death etc of any contractor's personnel under any circumstances. No compensation claim shall be admitted in this regard.

9 Guarantee:

The repair and maintenance of Instruments shall be guaranteed against any defects/faulty workmanship for a period of one year from the date of acceptance. During the above period if the items become defective, bidder will be responsible for making arrangements for repairing at free of charge. Contractor will issue the guarantee certificate at the time of commissioning/acceptance by department, mentioning the contents of the guarantee clause as mentioned above.

10 Security Instructions:

- 10.1 The bidder should note that entry inside BARC is restricted and it is compulsory for contractor to get police clearance (*as prescribed by security section of BARC*) for all his staff who will be entering BARC for work.

- 10.2 The contractor has to follow strictly the security regulations prevailing in BARC from time to time especially in regard to working hours, movement of materials and entry permits.
- 10.3 Identity cards for the contractor and contractor's persons (employees/consultants) will be issued after verification of their antecedents.
- 10.4 It will be the responsibility of the contractor to produce police verification certificate (from commissioner's office) for his persons before seeking permission to commence any work inside BARC premises.
- 10.5 Police verification certificate submitted with respect to an individual will be treated valid only for one year from the date of issue and on expiry of one-year period, a fresh police verification certificate will have to be arranged by the Contractor. Entry of personnel without a valid PVC is not permissible.
- 10.6 Local address (Mumbai) is required for preparation of photo identity cards at BARC.
- 10.7 The work can be carried out on all working days (Monday to Friday) between 9.00 hrs to 18.00 hrs excluding Govt. declared holidays.
All I-Cards, temporary entry permits issued to the contractor/contractor's personnel shall be surrendered after completion of work.

Enclosures:

- 1) Annexure-I: Scope of work & Technical specification.

(Smt R.Rajalakshmi)

Head, Advance Reactor Instrumentation & Electrical
Section, AHWRD, BARC
For and on behalf of President of India



Annexure-I

SCOPE OF WORK AND TECHNICAL SPECIFICATIONS

1.0 GENERAL

This part of the tender document deals with detailed specifications defining the technical requirements for executing the Removal, Repairs, Preventative maintenance, Calibration, Re-installation, Re-wiring of Pressure transmitters, Diff. Pressure Transmitters, Temperature Transmitters & Control Valves for the experimental facilities at Engg Hall-3.

These specifications are governed by technical conditions of the contract attached hereto.

The quotation shall be submitted as per the quotation format mentioned in Table-2

Contractor shall note that BARC reserves the right to increase or decrease the quantum of job mentioned here in this tender document. However, this will not be more than 25 % of what is specified in Table-2.

Any person entering BARC shall comply with all the requirements that are imposed by Health Physics Division & Security of BARC, from time to time.

All industrial safety rules like using safety shoes, safety belts, helmets and any other gears required should be complied with.

The workmanship for the repair and maintenance work shall be of the highest quality giving an excellent finish to the job. High-class standard shall be maintained throughout.

Total scope of the job comprises of the following

2.0 SCOPE OF WORK

2.1 Contractor's Responsibility

Providing the skilled and unskilled manpower experienced supervisory and technical staff.

2.2 Materials:

Free issue material: **No free issue material will be provided for execution of work.**

3.0 TECHNICAL SPECIFICATIONS FOR REMOVAL, CALIBRATION, RE-INSTALLATION, TUBING, WIRING, INSTALLATION OF CONTROL VALVES AND TERMINATION JOBS.

3.1 Removal and re-installation of Differential Pressure Transmitters

3.1.1 Electronic DP transmitters (Model FKC series, Make FUJI) are to be removed for calibration from installed location on a 50mmSch 40 pipe with "U" clamps and tied

with bolts and nuts/ existing transmitter racks and re-installed at the same location. Repair and Calibration of transmitters will be done at laboratory /Calibration Desk at site (Hall-3 & 7)

3.2 Removal and re-installation of Pressure Transmitters

- 3.2.1 Electronic SMART Pressure Transmitters (Model FKG series, Make FUJI) are to be removed for calibration from installed location on a 50mm Sch 40 pipe with 'U' clamps and tied with bolts and nuts/ existing transmitter racks and re-installed at the same location. Calibration of transmitters will be done at Laboratory.

3.3 Removal and re-installation of Temperature Transmitters

- 3.3.1 Temperature transmitters (Model KFD2-UT2-2, Make P&F) are installed in field at various junction boxes in Hall-3&7 on din rails. The Scope of work is removal, Repairs, Calibration and re-installation of transmitters after calibration check at Instrument lab at hall-7.

3.4 Re-routing of cables

- 3.4.1 Cables are to be removed from facility which is not operational.
- 3.4.2 The cables are to be laid between field junction boxes located at various floors to the control panel.
- 3.4.2 The cables shall be properly laid through the cable route as decided by the concerned engineer. The proper dressing, tying and identification shall be done. The entire cable laying procedure shall be subject to the approval of our concerned engineer.

3.5 Termination of Cable

- 3.5.1 The cables are to be terminated on the junction boxes with proper cross ferruling and crimping after re-routing. The functional checks namely continuity and IR test shall be carried out after re-installation.

3.6 Tubing & Swaging of 3/8" Compression type fittings & Swaging of 1/2" & 1/4" Brass Fittings

- 3.6.1 SS 3/8" tubing laying/modification/re-routing. Routing layout/ Modification for tubing will be given at site by the concern engineer.

3.7 Re-Installation of control valves.

Control valves (Model-GFlo 21/2" Globe Valve, Make-MASCOT) are installed at specific locations in the field.

- 3.7.1 These control valves are to be removed from field, for servicing and re-calibration of valve positioners and reinstalled back at site (Manual will be provided for execution of the work).

- 3.7.2 Before installing the control valve in the line, Repairing the piping and fittings of all foreign materials such as welding chips, scale, oil, greases where ever necessary to be performed.
- 3.7.3 Electrical and pneumatic connections to the control valves are to be checked.

4.0 PRICE SCHEDULE

The bidder shall quote unit rates for each item of work given in Table-2. The amount for each item shall be worked out and the requisite total given. NOT GIVING THIS BREAK-UP TO THE FULLEST DETAIL AS REQUIRED IN THE TABLES SHALL BE SUFFICIENT CAUSE FOR OUTRIGHT REJECTION OF THE OFFER WITHOUT ANY CONSIDERATION.

5.0 Completion of Contract

The jobs to be executed by the contractor shall be deemed to be completed only when

- (i) Inspection and testing are to be completed to the fullest extent.
- (ii) Any defects, deficiencies brought out during repairs and testing are to be rectified and retested wherever necessary till the repair/re-installation job is completed to the satisfaction of the engineer.

Table-2: Quotation Format

S.No.	Description	Unit	Qty.	Unit Rate (Rs)	Total (Rs)
1	Removal and re-installation of Differential Transmitters.	Nos.	30		
2	Calibration of Differential or pressure Transmitters	Nos	30		
3	Calibration & Reinstallation of temperature transmitters	Nos.	50		
4	Control valve Repair, Servicing, Calibration and Re- Installation	Nos.	3		
5	Re-routing of 37 core signal cables	Mtrs.	500		
6	Panel re-wiring & Terminations	Nos.	1000		
7	Re-routing/Modification of 3/8" SS tubing	Mtr	100		
8	Swaging of 3/8" & 1/4" fitting	Nos.	100		
				Total cost	
Taxes (18%)					
				Total cost Inclusive of taxes	
and levies					